## THURSDAY, FEBRUARY 24, 1876

## REPORT OF THE VIVISECTION COMMISSION

TO one who examines this voluminous Report of the Commission appointed some months ago to inquire into "the practice of subjecting live animals to experiments for scientific purposes," can deny that the Commissioners have done their work thoroughly, as they have done it without delay. The Commissioners evidently entered upon their important inquiry with the determination of discovering the whole truth as to the practice of vivisection, and of eliciting the opinions and reasons not only of its advocates but of its most determined opponents. A mere glance at the long list of names of the witnesses will serve to assure anyone that the evidence which has been obtained is the expression of the most weighty and trustworthy opinion on both sides, and both the advocates and opponents of the practice must feel relieved that the Commission was appointed and has done its work: the former will be glad that the true condition of things is now before the public, that the worst, so to speak, is known, and the latter that they now know definitely what they have to contend against.

The bulk of the blue-book is of course occupied by the evidence. Prefixed to this is the Report and recommendations of the Commissioners, and in the Appendices are contained various documents which throw light upon the inquiry and enable the reader to learn exactly what has been done in the matter up to the present time, and what will be the starting-point of Parliament in discussing the Report. We need do little more here than lay the Commissioners' recommendations before our readers. In their Report they candidly discuss the varied methods and uses of experimenting on living animals, the bearings of the evidence elicited during the inquiry, as well as every possible suggestion as to what legislative action ought to be taken in reference to the matter. As might be expected from the character of the men who compose the Commission, every point of importance is brought prominently out, the subject is looked at all round, and from every point of Their recommendations, therefore, which they give after briefly referring to the two Bills of last session, will without doubt have great weight with all who take an interest in the matter. They are as follows:

"What we should humbly recommend to Your Majesty would be the enactment of a law by which experiments upon living animals, whether for original research or for demonstration, should be placed under the control of the Secretary of State, who should have power to grant licences to persons, and, when satisfied of the propriety of doing so, to withdraw them. No other persons should be permitted to perform experiments. The holders of be permitted to perform experiments. licences should be bound by conditions, and breach of the conditions should entail the liability to forfeiture of the licence; the object of the conditions should be to ensure that suffering should never be inflicted in any case in which it could be avoided, and should be reduced to a minimum where it could not be altogether avoided. This should be the general scope of the conditions; but their detailed application should be left to be modified from time to time by the minister responsible according to the dictates of experience. In the administration of the system generally, the responsible minister would of course be guided by the opinion of advisers of competent knowledge and experience. Dr. Playfair's bill provided a machinery for the purpose, and some arrangements of the kind proposed in that measure would be necessary. But we think it is inexpedient to divide the responsibility of the Secretary of State with that of any other persons by statutory enactment, and we recommend that his advisers should be from time to time selected and nominated by himself. Their names should be made known to the profession and the public. It may be found desirable that one of the conditions to be attached to a licence should be that the experiments should be performed in some particular place; but this is a detail which may vary with circumstances, and we think it ought not to be stereotyped by statute.

"The Secretary of State must have the most complete power of efficient inspection and of obtaining full returns and accurate records of all experiments made. Any place in which experiments are performed must be registered and open to efficient inspection. The appointment of an inspector or inspectors will be necessary, and we have seen that the analogy of the Anatomy Act has been appealed to by many high authorities. It is to be observed that the duties under that Act are of a nature much more mechanical than those which will be required in the present instance. The inspectors must be persons of such character and position as to command the confidence of the public no less than that of men of science.

"Abuse of the power conferred by the licence must, of course, render the holder liable to its withdrawal; but this will involve great disgrace; and the withdrawal of the licence of an eminent man without real cause might be a serious public mischief. We have felt it necessary, therefore, to consider what steps should be taken when the question of such withdrawal may arise. We think that the holder of a licence, when he shall receive notice that the Secretary of State intends to withdraw it during the period for which it has been granted, should be at liberty to demand a public inquiry; that this inquiry should be held before one of the Judges of the Supreme Court, with two competent assessors to be appointed by the Secretary of State, the Court having the full power of conducting it as a legal investigation by summoning and swearing witnesses, issuing commissions, and so forth :that on the result of this inquiry, the Secretary of State should determine whether the licence ought to be withdrawn, and when he decides in the negative, should have the power of giving the holder of the licence the reasonable costs of his defence.

"Magistrates ought to be empowered, on cause shown, to authorise the police to enter and search the premises of persons suspected of performing experiments without a licence, and the performance of such experiments without a licence should be penal.

"It has been suggested that cases may occur in which an urgent necessity may have occasioned an experiment when there has been no licensed person within reach, and it has not been possible to apply for a licence; such as a sudden case of suspected poisoning, arising, perhaps, in a remote place, when the experiment has been reasonably considered indispensable, for the purpose either of cure or of medico-legal investigation. Bona fide cases of this kind ought evidently to be free from the risk of vexatious prosecution, and this can be secured by vesting in the Secretary of State the power of putting a veto on a prosecution.

"We believe that by such a measure as we have now proposed the progress of medical knowledge may be made compatible with the just requirements of humanity. In zeal for physiology, the country of Harvey, Hunter, Bell, and Darwin may well endure the test of comparison. We trust that Your Majesty's Government and the Parliament of this kingdom will recognise the claim of the lower animals to be treated with humane consideration—and will establish the right of the community to be

assured that this claim shall not be forgotten amid the triumphs of advancing science."

The recommendations, we are confident, will meet with the approval of all moderate persons on both sides. Indeed, some may be inclined to think that Science has made too great concessions to popular feeling; that she has made concessions all who take the trouble to read the Report and evidence will allow. The reasonable opponents of vivisection will no doubt also be prepared to make concessions, as they must admit that, after the evidence adduced in this inquiry, its uncompromising suppression would be a calamity to humanity; and they must also admit that the outcry of "cruelty to animals" has had a very slender justification. We hope the Report will speedily be brought before Parliament, and the recommendations essentially adopted, so that both for the credit of science and for the satisfaction of popular feeling the practice may be carried on under well-defined and universally understood regulations.

## " THE GEOLOGICAL RECORD"

The Geological Record for 1874. An Account of Works on Geology, Mineralogy, and Palæontology, published during the year. Edited by William Whitaker B.A., F.G.S., of the Geological Survey of England. (London: Taylor and Francis, 1875.)

HE late Sir Charles Lyell used to relate how, on the occasion of a visit which he paid to M. Deslongchamps at Caen, the eminent French palæontologist rose from the piles of books amid which he was working, and exclaimed, with a sigh of relief, "Let us devoutly thank Heaven that our lot is not cast with the next generation of geological workers !--for how they will manage to grapple with the ever-increasing literature of the science I am at a loss to conceive." The difficulty which Deslongchamps thus playfully anticipated is now a present and pressing one, which, it is not too much to assert, is almost painfully felt by every scientific student and worker. While, on the one hand, it is absolutely impossible that any man can read everything that issues from the press relating even to his own department of science, yet, on the other, no one can afford to neglect the results which are being obtained by his contemporaries. It is sad to remember that a large part of the energy of the illustrious Dalton was wasted-owing to his not being able to make himself acquainted with what other chemists of his day were accomplishing-in solving problems which had been already completely disposed of. And we are persuaded that the painful questions of priority in discovery which frequently arise between the workers in the same branch of science ought to be referred, not to the existence of petty jealousies or of a disposition to take unworthy advantages, but to the difficulty which each investigator finds in consulting the latest published results of his fellow-workers in the same paths of inquiry.

So far as relates to the scientific memoirs of past years, the Royal Society has conferred an inestimable boon on the labourers in every department of science by the publication of its admirable "Catalogue," for the appearance of the first supplement to which we are now anxiously looking forward. Aided by a grant from the British Association, too, the "Zoological Record" gives a yearly summary of the work which is being accomplished in that

department of science. It has long been felt as a serious and yearly increasing want—though one which has been already to some extent met by publications in France, Germany, and Switzerland—that no similar work of reference for the geological sciences has hitherto appeared in this country. We are now happy to inform the readers of NATURE that this want has been very admirably supplied by the volume, of which the title appears at the head of the present article.

In the preface to this work the editor gracefully notices the important services rendered by his fellow-workers, but he has not referred to the great difficulties which attended the first establishment of this important yearbook of reference; for the overcoming of which difficulties we are mainly indebted to his own energy and perseverance. When the proposal for this work was first drawn up by Mr. Whitaker-whose well-known works on Tertiary Geology, and especially those relating to the vicinity of the metropolis, gave him such claims on the confidence of geologists-the Council of the British Association did not find itself in a position to accord to it immediately the same assistance as it annually gives to the "Zoological Record." Undeterred by this preliminary difficulty, however, Mr. Whitaker determined to proceed with his task unaided. A list of guarantors was formed. who agreed to indemnify the editor against pecuniary loss; and among those who thus signified their sense of the importance of the work, we find the names of Lyell, Poulett-Scrope, and Logan, who have not lived to witness its publication, together with those of almost all the leaders of geological science in this country. Happily, the sale of the work has sufficed, even during this its first year of publication, to cover all expenses; and a grant from the British Association will serve to remove any anxieties which the editor might have felt as to its future.

In the plan of the work we think that Mr. Whitaker has exercised a very wise discretion. He has not attempted anything like reviews or critical notices of the various books and memoirs which he catalogues. In the publications in which this has been done, like the "Die Fortschritte auf dem Gebiete der Geologie, 1872," edited by Dr. Hermann J. Klein, or the "Revue Géologique Suisse pour l'Année 1874" of Ernest Favre, we have nothing like the complete work of reference supplied by the publication of the "Geological Record." In the latter, the notices of the various contributions to geological science are confined to terse statements of the subjects treated in them, with an enumeration of the plates and maps by which they are illustrated. Where, however, a short account of recent discovery or a summary of a new classification could be given in a few lines, or the bearing of a memoir on the progress of science briefly indicated, this has been often well done in the work before us.

The difficult task of classifying the memoirs according to the various subjects of which they treat has been, on the whole, very successfully accomplished; and for the general superintendence of the work, Mr. Whitaker has secured the aid of a number of well-known cultivators of different departments of the science to act as subeditors. Mr. Topley takes the departments of British and Economic Geology; Mr. Labour deals with the works relating to Europe, the Arctic Regions, and America; Mr. Drew with those on Asia; and Mr. Robert